

## ABSTRACT

The present invention relates to the unbalanced multi-block styrene-butadiene-styrene (SBS) and provides the copolymer represented by the following structure,

$mB1 * S1 - lB2 - sB3$ ,

5        wherein B is a butadiene block, S is a styrene block,  $l$ ,  $m$ ,  $s$  are the relative size among the blocks (i.e., large size, middle size, and small size, respectively), and  $*$  is the tapered block between  $mB1$  block and  $S1$  block (i.e., random copolymer of a kind). They have to satisfy the following related expressions.

$$a) 0.01/lB2 \leq mB1 \leq 0.5/lB2 \text{ and } 0.01mB1 \leq sB3 \leq 0.5mB1$$

10        b)  $0.5S1 \leq S2 \leq 1.5S1$

$$c) 5\% \leq * \% \leq 25\%$$

In the related expression, the value of  $B1$  and  $S1$  include tapered block for the sake of convenience, and  $*\%$  is the random styrene content in all the styrene in SBS.

The unbalanced multi-block SBS of this invention exhibits excellent processability  
15    in the preparation of hot-melt adhesives, reducing processing hours. It also exhibits good adhesive properties such as initial loop tack,  $180^\circ$  peel strength, and holding power, and it has a normal level of heat resistance.